

Body :	
Greatest depth.....	36
Least depth of tail.....	14
Length of caudal peduncle .....	21
Head :	
Greatest length .....	25.5
Width of interorbital area.....	9
Length of snout.....	7
Length of maxillary.....	6
Diameter of eye.....	7
Dorsal :	
Distance from snout.....	37.5
Length of base.....	43.5
Height of longest spine.....	12
Height of highest soft ray .....	12
Anal :	
Length of base.....	16.5
Height of longest ray .....	9
Caudal :	
Length of middle rays.....	13.2
Length of outer rays .....	25
Pectoral, length.....	24
Ventral, length .....	19
Dorsal rays .....	VIII, 17
Anal rays.....	II, 20
Scales .....	4-43-13
Transverse series below lateral line .....	35

SAN FRANCISCO, CAL., *February* 28, 1880.

**DESCRIPTION OF A NEW FLOUNDER (PLATYSOMATICHTHYS STOMIAS), FROM THE COAST OF CALIFORNIA.**

By **DAVID S. JORDAN** and **CHARLES H. GILBERT.**

Body extremely elongate for the family, thin, and strongly compressed. Head rather long and slender; the snout somewhat pointed. Mouth extremely large and oblique, the lower jaw included; the maxillary very long and slender, reaching much beyond the eye, its length about half that of the head. Premaxillary in front above the level of the lower eye.

Teeth in the upper jaw anteriorly long, slender, and wide-set. Some of the teeth very freely depressible, the larger ones scarcely movable. Posteriorly the teeth are much smaller, close-set, and fixed in two rows; the inner row continuous with the larger anterior series, the outer row extending outside of some of the enlarged teeth.

Teeth in the lower jaw very sharp and slender, long, and wide-set, alternating with shorter ones, which are very freely depressible. Outside of the larger teeth is a series of small, fixed, close-set teeth. The larger teeth in each jaw are distinctly arrow-shaped. Pharyngeal teeth apparently in one row.

Eyes large, dextral, their anterior margins about even with each other; the upper eye larger and directed obliquely upward. A conspicuous ocular ridge about the upper eye, becoming continuous with the lateral line. Interorbital space narrow, not half the width of the eye, scaly, as is the space in front of it. Cheeks wide, the posterior edge of the preopercle free. Opercle rather short and weak. Premaxillary protractile, capable of little protrusion.

Gill-rakers long and strong, about  $4 + 13$  in number, the longest more than half the diameter of the eye.

Scales very small and thin, irregularly arranged, their margins weakly ciliated, in about 135 transverse series; about 100 tubes in the course of the lateral line. The lateral line is nearly straight, gently ascending in front. No accessory lines. Scales on blind side similar.

Dorsal fin beginning just behind the middle of the eye, its rays low, especially anteriorly, its greatest height considerably behind the middle. Caudal fin somewhat forked. Anal fin higher than the dorsal, its highest rays about midway. No spine before anal. Caudal peduncle long and slender, about as long as the maxillary. Pectoral fins short, the one on the right or eyed side longest, its length nearly equal to that of the maxillary. Ventral fins very short, reaching just past the vent.

Fin rays: D. 101; A. 85.

Color plain brown, with darker punctulations. Left side white, the many dark points giving it a soiled appearance. Fins dusky.

This species is known to us from one example over a foot long, bought in the San Francisco market, and taken just outside the Golden Gate. It doubtless reaches a much larger size, and the adult is probably less slender than this example.

It differs from its congener, the Greenland Halibut, *Platysomatichthys hippoglossoides*, of the North Atlantic, in the slenderer body, larger mouth, longer gill-rakers, and narrow interorbital space, but the two appear to agree in all respects of generic value.

We regret the necessity of using the clumsy and inappropriate generic name *Platysomatichthys* for these fishes instead of the name *Reinhardtius* proposed by Professor Gill. The former name, although later in date, has priority of definition.\*

*Table of measurements of Platysomatichthys stomias.*

Extreme length .....	12.9 inches
Length to base of caudal .....	10.9 inches = 100
Greatest depth of body .....	.30
Least depth .....	.07
Length of caudal peduncle .....	.12
Length of head .....	.28
Number of gill-rakers .....	4, 11
Length of longest gill-raker .....	.032
Length of snout .....	.063
Length of maxillary .....	.152

\* In a paper written later, but by accident printed earlier (Proc. U. S. Nat. Mus., 1880, 51), we have recognized this species as the type of a distinct genus, *Atheresthes*.

Length of mandible .....	.168
Greatest width of maxillary .....	.03
Diameter of orbit .....	.07
Distance from snout to dorsal .....	.116
Length of base of dorsal .....	.79
Greatest height of dorsal .....	.094
Distance from snout to anal .....	.346
Length of base of anal .....	.615
Height of longest ray .....	.105
Length of middle caudal rays .....	.142
Length of outer caudal rays .....	.185
Distance from snout to pectoral .....	.295
Length of pectoral (right side) .....	.128
Distance from snout to ventral .....	.127
Length of neutral .....	.057
Dorsal rays .....	101
Anal rays .....	85
Number of tubes in lateral line .....	98

SAN FRANCISCO, CAL., *March 1, 1880.*

**DESCRIPTION OF A NEW EMBIOTOCCOID FISH (CYMATOGASTER ROSACEUS), FROM THE COAST OF CALIFORNIA.**

By **DAVID S. JORDAN** and **CHARLES H. GILBERT.**

Body rather elongate, deepest at the shoulders; the profile thence to the occiput convex, the occipital and interorbital region considerably depressed; body tapering backwards from the shoulders into a short and slender caudal peduncle.

Head small, thick, the snout blunt. Mouth rather large, little oblique, the lower jaw included; maxillary slightly passing the vertical from the front of the orbit; premaxillary anteriorly on a level with the inferior margin of the pupil. Eye very large, its diameter about one-third the length of the head; interorbital region very broad. Lower lip with a narrow frenum, above which its margin is narrowly free.

Teeth large, in a single row, much as in *Cymatogaster frenatus*, but blunter, slightly compressed and truncate at tip, somewhat incisor-like, the edge, however, entire. Teeth few and distant, about  $\frac{12}{8}$ ; none on the sides of the lower jaw. They are larger, blunter, and more wide-set than in *Cymatogaster aggregatus*.

Scales on the cheeks in three series below.

Gill-rakers small and weak, much as in *Cymatogaster aggregatus*, curved and apparently smooth.

Scales large, but rather smaller than in any of the related species, 50 in the course of the lateral line.

Spinous dorsal high; the first spine two-fifths the length of the highest; the sixth to tenth of nearly equal height, and higher than the soft rays. Anal fin with the base oblique and convex, the spines rather strong, more or less curved, as in *Abeona*.